UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rey 1459

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

VIENNA, VA 22183

2618

DATE MAILED: 09/16/2008

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNIEY DOCKET NO.
 CONFIRMATION NO.

 10002,746
 11/02/2001
 Amab Das
 129250-002099/US
 3832

TITLE OF INVENTION: VARIABLE RATE CHANNEL QUALITY FEEDBACK IN A WIRELESS COMMUNICATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	12/16/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	ed belôw or directed oth	ng the Patent, advance of nerwise in Block 1, by (	orders and notification (a) specifying a new o	of n	naintenance fees v pondence address:	ill be and/o	mailed to the current (b) indicating a sepa	correspondent	ondence address as EE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
32498 CAPITOL PA' P.O. BOX 1995 VIENNA, VA 2	TENT & TRADE	<sup>72008</sup> MARK LAW FIR	M, PLLC	I her State addr trans	Cer reby certify that the es Postal Service vessed to the Mail smitted to the USP	tificate is Fec( /ith sul Stop FO (57	of Mailing or Transi i) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the di	nission deposit t class n above, ate indic	ed with the United nail in an envelope or being facsimile ated below.
									(Depositor's name)
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APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONF	TRMATION NO.
10/002,746 TITLE OF INVENTION	1 I/02/2001 T: VARIABLE RATE CF	HANNEL QUALITY FE	Amab Das EDBACK IN A WIRE	LES	S COMMUNICAT		250-002099/US YSTEM		3832
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE I	DUE	PREV. PAID ISSU	SFEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional EXAM	NO	\$1440 ART UNIT	\$300 CLASS-SUBCLASS		\$0 		\$1740		12/16/2008
NGUYEN.		2618	455-067I30						
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATA less an assignce is ident h in 37 CFR 3.11. Comp	inge of Correspondence "Indication form aed. Use of a Customer	registered attorne 2 registered paten listed, no name wi	up to rnativ single y or a t attor ill be or typ the pa	3 registered pater rely, e firm (having as a sgent) and the nam meys or agents. If printed. ec) stent. If an assign assignment.	memb es of u no nan	er a 2er to e is 3entified below, the do	ocument	has been filed for
Please check the appropr	iate assignee category or	categories (will not be p	orinted on the patent):	۵	Individual 🚨 Co	orporati	on or other private gro	oup entit	y Government
Advance Order -	vo small entity discount p	permitted)	b. Payment of Fee(s):  A check is enclor Payment by cred The Director is heoverpayment, to	sed. it care ereby	d. Form PTO-2038	is atta	ched. required fee(s), any de	ficiency.	
	s SMALL ENTITY state	as. See 37 CFR 1.27.					TTY status. Sec 37 CI		
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	ites Patent and Trademar	k Office.	nan u	ne applicant; a regi	sterea	ttorney or agent; or th	e assign	ee or other party in
Authorized Signature					Date				
Typed or printed name				Registration No.					
This collection of inform an application. Confiden submitting the completes this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC t13-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to to O NOT SEND FEES OR	ion is required to obtain  1.14. This collection  y depending upon the  he Chief Information C  COMPLETED FORM	n or ro is esti indiv Office IS TO	etain a benefit by t imated to take 12 idual case. Any co r, U.S. Patent and D'THIS ADDRESS	he pub minuter mment Trader S. SEN	ic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa O TO: Commissioner I	by the g g gather ne you r artment of for Pater	USPTO to process) ing, preparing, and require to complete of Commerce, P.O. nts, P.O. Box 1450,

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#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/002,746	11/02/2001	Amab Das	129250-002099/US 3832			
32498	7590 09/16/2008		EXAMINER			
CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC			NGUYEN, THUAN T			
P.O. BOX 1995			ART UNIT	PAPER NUMBER		
VIENNA, VA 22	2183		2618			
			DATE MAILED: 09/16/2008			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 840 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 840 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)			
10/002,746	DAS ET AL.			
Examiner	Art Unit			
THUAN T. NGUYEN	2618			

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	THUAN T. NGUYEN	2618	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	lication. If not include will be mailed in due	ed course. THIS
This communication is responsive to			
2. The allowed claim(s) is/are 1 and 4-15.			
	been received. been received in Application No		tion from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the red	quirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			OTICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus  (a) including changes required by the Notice of Draftspers  1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the state of the state	on's Patent Drawing Review (PTO- s Amendment / Comment or in the C 84(c)) should be written on the drawin he header according to 37 CFR 1.121(c	office action of ags in the front (not the	
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT</li> </ol>			Note the
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	Notice of Informal P.     Interview Summary	(PTO-413),	
□ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Dat 7. Examiner's Amendn		
Paper No./Mail Date	8. Examiner's Stateme	nt of Reasons for Allo	wance
of Biological Material	9. Dother .		

/TONY T. NGUYEN/ Primary Examiner Art Unit: 2618 Application/Control Number: 10/002,746 Page 2

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## DETAILED ACTION

## Response to Appeal Brief

 By filing an appeal brief with arguments, applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

## Allowable Subject Matter

Claims 1 and 4-15 have been allowed.

# Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest a method for transmitting channel quality information in a wireless communication system comprising at least one base station and at least one mobile station, the method comprising: varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station, wherein the mobile station reports channel quality information at a first rate in the absence of a reception of a data transmission from the base station and, upon detection of a reception of a data transmission from the base station, the mobile station reports channel quality information at a second rate for a prescribed duration as in claim 1; a method for adapting the rate of reporting channel quality information in a wireless communication system including at least one base station and at least one mobile station, the method comprising: reporting channel quality information from the at least one mobile station to the at least one base station at a first

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rate in the absence of a reception of a data transmission at the at least one mobile station (as of claim 11); and a method for transmitting channel quality information in a wireless communication system including at least one base station and at least one mobile station, the method comprising: varying a rate for reporting channel quality information from a mobile station to a base station as a function of the number of base stations with which the mobile station is communicating.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Balachandran; Krishna et al. (US 6108374 A) disclose a system and method for measuring channel quality information.

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to the New Central Fax number: (571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314. Application/Control Number: 10/002,746

Art Unit: 2618

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895.

The examiner can normally be reached on Monday-Friday from 10:00 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Edward Urban, can be reached at (571) 272-7899.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tony T. Nguyen/ Primary Examiner

Art Unit 2618

TTN

April 22, 2008